



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/787,096	03/13/2001	Gijsbert Joseph Van Den Enden	PHN 17,551	1082

24737 7590 09/24/2004

PHILIPS INTELLECTUAL PROPERTY & STANDARDS
P.O. BOX 3001
BRIARCLIFF MANOR, NY 10510

EXAMINER

AGUSTIN, PETER VINCENT

ART UNIT	PAPER NUMBER
----------	--------------

2652

DATE MAILED: 09/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<p align="center">Office Action Summary</p>	<p>Application No.</p> <p>09/787,096</p>	<p>Applicant(s)</p> <p>VAN DEN ENDEN, GIJSBERT JOSEPH</p>	
	<p>Examiner</p> <p>Peter Vincent Agustin</p>	<p>Art Unit</p> <p>2652</p>	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 13-22 is/are rejected.
- 7) ☒ Claim(s) 9-12 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Response to Amendment

1. After reviewing closely the prosecution history, applicant's request to withdraw the finality of the final Office Action mailed on June 22, 2004 is persuasive. It is noted that the rejection of claim 17 based on art was the first time rejection to which applicant did not have a chance to respond yet. However, the 102 rejection of claims 3 & 15, based on Takasago et al. in the Office Action of July 22, 2004 is not a new ground of rejection. This ground of rejection was presented in the first Office Action mailed on December 11, 2003, which the applicant has seen and responded to. The finality of the Office Action mailed on June 22, 2004 is hereby withdrawn.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-3 & 13-15 rejected under 35 U.S.C. 102(b) as being anticipated by Takasago et al. (hereafter Takasago) (US 4,730,290).

In regard to claim 1, Takasago discloses a method of examining a record carrier (figure 1, element 1) for the presence of a defect, comprising: following a track to be examined and monitoring the resulting tracking signal (column 5, lines 5-20); and rating the examined recording track on the basis of characteristics of the resulting tracking signal (column 5, line 47 thru column 6, line 14).

In regard to claim 2, Takasago discloses that the examined recording track is rated as being defective if the absolute value of the tracking signal has a value which exceeds a predetermined signal threshold for a predetermined period of time or longer (column 5, line 47 thru column 6, line 14).

In regard to claim 13, Takasago discloses a method of recording information on a record carrier (figure 1, element 1), comprising: monitoring a recording track to provide a rating of defects contained on the track (column 5, lines 5-20; column 5, line 47 thru column 6, line 14) and based on the resulting tracking signal, determining whether the recording process is to be continued or discontinued (column 7, lines 6-19).

In regard to claim 14, Takasago discloses that the recording process is discontinued (column 7, lines 6-19) if the absolute value of the tracking signal appears to have a value which exceeds a predetermined signal threshold for a predetermined period of time or longer (column 5, line 47 thru column 6, line 14).

In regard to claims 3 & 15, Takasago discloses that the tracking signal has a nominal signal value of zero which corresponds to the center of a track (column 5, line 49-51), has a maximum value that corresponds to a maximum lateral deviation with respect to the center of a track (figure 3a), and a level of a preselected fraction of the maximum value (V_{REF}) is chosen as the predetermined signal threshold.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

Art Unit: 2652

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 4, 16-19, 21 & 22 rejected under 35 U.S.C. 103(a) as being unpatentable over Takasago as applied to claims 2, 14 & 15 above.

For a description of Takasago, see the rejection above. Furthermore, in regard to claims 18 & 21, Takasago discloses that the tracking signal has a nominal signal value of zero which corresponds to the center of a track (column 5, line 49-51), and has a maximum value that corresponds to a maximum lateral deviation with respect to the center of a track, and a level of a preselected fraction of the maximum value (V_{REF}) is chosen as the predetermined signal threshold. However, Takasago does not disclose that a level of a preselected fraction of said maximum value chosen as the predetermined signal threshold is equal to approximately 0.5 or approximately 2/3. Takasago shows an unspecified maximum value and an unspecified fraction of said maximum value having order of magnitude as shown in figure 3a for a typical tracking error signal.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use a preselected fraction of approximately 0.5 or approximately 2/3 because applicant has not disclosed that using a preselected fraction of approximately 0.5 or approximately 2/3 provides an advantage, is used for a particular purpose, or solves a stated problem and the method of examining would have been expected to perform equally well within the typical tracking error signal fraction of said maximum value (V_{REF}) taught by Takasago including the claimed preselected fraction of approximately 0.5 or approximately 2/3 because all these fractions perform the same function of providing a threshold level that decides whether an examined track is defective or not.

In regard to claim 4, 16, 19 & 22, Takasago does not disclose that said predetermined period of time lies in a range from approximately 50 μ s to approximately 75 μ s. In regard to claims 19 & 22, Takasago does not disclose that said predetermined period of time is approximately 60 μ s. Takasago shows an unspecified period of time having order of magnitude as shown in figure 3 for a typical tracking error signal.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to choose a period of time lying in a range from approximately 50 μ s to 75 μ s or 60 μ s because applicant has not disclosed that choosing a period of time lying in this range provides an advantage, is used for a particular purpose, or solves a stated problem and the method of examining would have been expected to perform equally well within the typical tracking error signal time period taught by Takasago including the claimed time period lying in a range from approximately 50 μ s to approximately 75 μ s or approximately 60 μ s because all these values/ranges of time period perform the same function of providing a reference time duration that decides whether an examined track is defective or not.

Furthermore, in regard to claim 17, Takasago discloses a recording device (figure 1) suitable for the recording of information on a record carrier (1) of the type comprising a multitude of concentric substantially circular recording tracks, which recording device comprises: a control unit (30); a write/read unit (4) adapted to aim a laser beam at a track of a record carrier under control of the control unit, which tracking signal has been determined on the basis of the reflected laser light (column 4, lines 41-52). The examiner views claim 17 as corresponding to previously rejected claims. For instance, the claimed write/read unit is believed to be present in the recording method and monitoring step of claim 13; and the claimed control

Art Unit: 2652

unit, as described by claim 17, is adapted to carry out the method as claimed in claim 16.

Therefore, the rejection of claim 17 is not considered a new ground of rejection.

6. Claims 5 & 6 rejected under 35 U.S.C. 103(a) as being unpatentable over Takasago as applied to claim 1 above, and further in view of Tsuchiya et al. (hereafter Tsuchiya) (JP 01253638 A).

For a description of Takasago, see the rejection above. However, in regard to claim 5, Takasago does not disclose the steps of a) examining the integrity of predetermined test tracks of the record carrier, b) examining the integrity of tracks adjacent the relevant test track each time that upon the examination a test track appears to be defective, in order to determine in this way the number of tracks affected by the same spot defect, c) entering the relevant tracks in a defect list each time that the number thus determined in the step (b) is greater than a predetermined threshold value, and d) storing the defect list in a memory.

Tsuchiya discloses the steps of a) examining the integrity of predetermined test tracks of the record carrier (purpose, line 2), b) examining the integrity of tracks adjacent the relevant test track each time that upon the examination a test track appears to be defective (constitution, lines 10-11), in order to determine in this way the number of tracks affected by the same spot defect, c) entering the relevant tracks in a defect list (constitution, lines 4-7) each time that the number thus determined in the step (b) is greater than a predetermined threshold value, and d) storing the defect list in a memory (28). Furthermore, in regard to claim 6, Tsuchiya discloses that a predetermined number of tracks between successive test tracks is skipped (purpose, lines 1-3). It would have been obvious to one of ordinary skill in the art at the time of invention by the

Art Unit: 2652

applicant to have added the steps of Tsuchiya to the method of Takasago, the motivation being to improve reliability in checking serious defects (see purpose, line 1).

7. Claims 7, 8 & 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takasago & Tsuchiya as applied to claims 5 & 6 above, and further in view of Hosoya (US 4,821,521).

For a description of Takasago & Tsuchiya, see the rejections above. However, in regard to claim 7, Takasago & Tsuchiya do not disclose that the defect list is recorded on the examined record carrier. Furthermore, in regard to claim 8, Tsuchiya discloses the step of first providing, in an examination phase, a defect list of tracks affected by a comparatively large spot defect by means of a method as claimed in Claim 6 (see claim 6 rejection above). However, Takasago & Tsuchiya do not disclose the steps of subsequently recording information on the disc in a recording phase while reference is made to said defect list, the recording tracks included in said defect list being skipped in the recording process. Furthermore, in regard to claim 20, Takasago & Tsuchiya do not disclose that approximately 50 tracks between successive test tracks are skipped. Tsuchiya discloses skipping an unspecified number of tracks.

Hosoya discloses storing defective sector information in an optical disc (column 6, lines 22-25). It would have been obvious to one of ordinary skill in the art at the time of invention by the applicant to have stored the defect list of Takasago & Tsuchiya to the record carrier of Hosoya, the motivation being to provide convenient non-volatile retrieval of which tracks are usable for recording.

Hosoya discloses recording information on the disc in a recording phase while reference is made to a defect list, the recording tracks included in the defect list being skipped in the

Art Unit: 2652

recording process (column 2, lines 64-68; see also figure 7). It would have been obvious to one of ordinary skill in the art at the time of invention by the applicant to have added the step of skipping defective tracks during recording as suggested by Hosoya to the method of Takasago & Tsuchiya, the motivation being to eliminate wasteful recording on unrecordable tracks.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to skip approximately 50 tracks because applicant has not disclosed that skipping approximately 50 tracks provides an advantage, is used for a particular purpose, or solves a stated problem and the method of examining would have been expected to perform equally well within the number of tracks to be skipped taught by Tsuchiya, including the claimed 50 tracks because both perform the same function of eliminating the need to examine the disc one track at a time.

Allowable Subject Matter

8. Claims 9-12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims (see previous action for reasons for the indication of allowable subject matter).

Response to Arguments

9. Regarding claim 1, the applicant argues that Takasago teaches detection of an off-track situation and not detection of defects within the disc. Applicant argues that applicant's invention as recited by the rejected claims defines subject matter for rating of tracks on the disc for the purpose of determining if there is a defect in the track. Applicant further argues that Takasago provides no teaching, suggestion, or motivation for rating a track for a defect and that Takasago

Art Unit: 2652

examines the track signal to determine if there is an off-track situation which could be the result of a vibration, and Takasago provides no teaching for rating the track for defects. Applicant's argument is not found persuasive because: Takasago does teach a method of examining a record carrier for the presence of a defect. See the analysis of claim 1 and discussion of teaching by Takasago as follows. The claim requires "rating the examined recording track on the basis of characteristics of the resulting tracking signal". Takasago covers this claimed limitation by teaching "when a defect is present on the track, the tracking error signal 5 has a large amplitude" (column 5, lines 44-55), i.e., the track being rated/classified as having defects on the basis of the characteristics of the resulting tracking signal for having a large amplitude. It is inherent that the track is being rated as having defects when a tracking error signal has a large amplitude, e.g., the signal portion 15 of figure 3a. Therefore, "when the light spot is exactly placed on the track 103, the tracking error signal 5 is zero volt, as shown in a signal portion 14 of figure 3a. When a defect is present on the track, the tracking error signal 5 has a large amplitude, as a signal portion 15 of figure 3a" taught by Takasago clearly meets the claimed steps of "following a track to be examined and monitoring the resulting tracking signal; and rating the examined recording track on the basis of characteristics of the resulting tracking signal". According to the method taught by Takasago, the condition of the track being known as having defects or not is shown by the indication of the resulting tracking signals. The track is indirectly rated and being examined for defects. Claim 1 does not require how the track is being rated.

10. Regarding claim 2, the applicant mainly argues that the comparator of Takasago providing a logical "1" is not equivalent to rating a track as defective much less rating a track as defective if the absolute value exceeds a predetermined value for a predetermined time as recited

Art Unit: 2652

in claim 2. The argument is not persuasive. Takasago teaches that a portion of signal 15 (with large amplitude because a defect occurred on the medium), which departs from a range, defined by the reference voltages $+V_{REF}$ and $-V_{REF}$ is detected and converted to a pulse of level 1 where the duration time of level 1 is checked. This teaching meets the claimed limitation "the examined recording track is rated as being defective if the absolute value of the tracking signal has a value which exceeds a predetermined signal threshold for a period of time or longer". Again, note that the claim does not require how the track is being rated.

11. Regarding claim 13, the applicant mainly argues that Takasago does not teach "rating the track" as recited in the rejected claims. Applicant is referred to the responses to applicant's arguments cited above that applicant's claims do not require how the track is being rated and the fact that the track is known to have defects when a tracking signal is detected with large amplitude, the track is being rated or classified.

12. Regarding claim 14, the applicant argues that column 5, line 47 thru column 6, line 14 of Takasago teach that if the digression of the tracking signal reaches a certain level an indication that tracking signal is off-track will result by multiple logical "1" pulses being emitted, and that the multiple logical "1" pulses result from a sway in the tracking signal, which is not equivalent to exceeding a predetermined threshold for a predetermined period of time. Applicant further argues that there is no predetermined period of time within the tracking signal that is exceeded within Takasago to create the additional logical "1" pulses and that the additional period of time referred to by Takasago is the additional logical "1" pulses themselves and not a period of time that the tracking signal exceeds a threshold. The argument is not persuasive. Takasago teaches that if the logical "1" pulses result from comparing the tracking error signal 5 with reference

Art Unit: 2652

voltages $+V_{REF}$ and $-V_{REF}$, i.e., the claimed predetermined signal threshold. Column 5, line 67 thru column 6, line 5 teaches that the duration time of level "1" is checked whether it exceeds a predetermined time T_1 . Further, column 6, lines 7-14 teach that "when the duration time of level "1" in the signal 23 exceeds another predetermined time T_2 , the off-track signal 26 is sent from the time width detecting circuit 24 to another latch circuit 28, to be latched. An output signal 39 from the latch circuit 28 is sent to a controller 30 through an interface circuit 31.", which clearly teaches the claimed "exceeds a predetermined signal threshold for a predetermined period of time or longer". Finally, the applicant appears to have ignored column 7, lines 6-19 of Takasago, which teach that "according to the present embodiment, even when an off-track is caused by a defect on an optical disc or abnormality or unevenness of the characteristics in an optical disc apparatus, the off-track is detected, and the recording of data in the optical disc is stopped", which was stated on the previous Office Action. This meets the claimed limitation "the recording process is discontinued".

13. Regarding claims 3 & 15, the applicant argues that there is no disclosure or suggestion within Takasago for taking any fractional portion of the reference voltages as the predetermined threshold. Applicant further argues that the maximum lateral deviation disclosed by Takasago is the occurrence of an off-track situation and the tracking error signal taught by Takasago does not have a greater value during the period of off-track, and that during off-track the tracking error signal swings from plus to minus exceed the reference voltages, but the tracking error signal is no greater than in track digressions. Applicant argues that there is no teaching within Takasago for the tracking error signal value to have a maximum value that occurs at a point of the maximum lateral deviation from the center of the track. This argument is not found persuasive. First of all,

Art Unit: 2652

claims 3 & 15 do not recite taking a fractional portion of the reference voltages as the predetermined threshold. The claims recite “a preselected fraction of the maximum value is chosen as the predetermined signal threshold”. Figure 3a shows that a tracking error signal has a large amplitude, as a signal portion 15, in a case when a defect is present on the track, which is read to be “maximum value that corresponds to a maximum lateral deviation with respect to the center of a track”; and column 5, lines 49-51 teach that “when the light spot is exactly placed on the track 103, the tracking error signal 5 is zero volt”, i.e., there is no lateral deviation with respect to the center of a track. Finally, figure 3a shows that $+V_{REF}$ is a reference voltage which is lower than the peak value, and which is clearly a fraction of the peak value. Therefore, this meets the claimed “a level of a preselected fraction of the maximum value is chosen as the predetermined signal threshold”. Applicant should note that V_{REF} is read to be the claimed “preselected fraction” and not the claimed “maximum value”.

14. Regarding claims 18 & 21, the applicant argues that the line of reasoning is no proper for an obviousness rejection, and that there is a clear purpose and advantage to the stated limitations in that the present invention is rating the track. This is not found persuasive. While the applicant's specification does provide a clear purpose and advantage of rating a track, it does not provide a clear purpose and advantage of why specific values or ranges such as the claimed 0.5 or 2/3 are selected. Choosing these values would have been an obvious matter of design choice. *In re Rice and Wilson* 144 USPQ 476 (CCPA 1965) involved a rejection based on design choice. On appeal, the court affirmed a design choice rejection based on the sound explanation and the applicant's failure to submit evidence that the differences between the prior art and the claims at issue resulted in a difference in function or yielded an unexpected result. See also *In re Launder*

Art Unit: 2652

and Hosmer, 105 USPQ 446 (CCPA 1955). Therefore, the line of reasoning is proper for an obviousness rejection.

15. Regarding claims 4, 16, 19 & 22, the applicant argues that the line of reasoning used in the rejection is not valid, and that the advantages are clearly stated in the specification. The examiner disagrees. While the applicant's specification does provide a clear purpose and advantage of preventing accidental writes to the adjacent track, it does not provide a clear purpose and advantage of why specific values such as the claimed approximately 50 microseconds or approximately 75 microseconds are selected. Choosing these values would have been an obvious matter of design choice. *In re Rice and Wilson* 144 USPQ 476 (CCPA 1965) involved a rejection based on design choice. On appeal, the court affirmed a design choice rejection based on the sound explanation and the applicant's failure to submit evidence that the differences between the prior art and the claims at issue resulted in a difference in function or yielded an unexpected result. See also *In re Launder and Hosmer*, 105 USPQ 446 (CCPA 1955).

16. Regarding claim 17, the applicant argues that Takasago does not disclose or suggest performing the actions recited in claims 13-17, i.e., the predetermined time periods recited by the rejected claims in a range between 50 microseconds and 75 microseconds, the recited period of time is approximately 60 microseconds, a recording device having thresholds that are a preselected fraction of the signal level representative of the maximum deviation from the center of the track, and a recording device that discontinues recording if the tracking signal exceeds a threshold level for a predetermined period of time. The examiner disagrees. The applicant is referred to the responses to the applicant's arguments cited above regarding claims 13-16.

Art Unit: 2652

17. Regarding claims 5 & 6, the applicant argues that Tsuchiya teaches a reference value WC that is set to have the magnitude of defect smaller than a normal checking reference, the recording of each defect that exceeds the reference value WC within a memory and then reads the contents of the memory, which includes each individual defect, and that this is not equivalent to the recitation within the rejected claims of c) entering the relevant tracks to any defect list each time that the number thus determined in step (b) is greater than a predetermined threshold value. Applicant further argues that there is no suggestion or disclosure within Tsuchiya for providing a threshold value to determine the number of tracks that are affected by the same spot defect and only recording those defects that are at least as large as the threshold. The examiner disagrees because although these limitations are not explicitly stated using the exact words of the applicant's claims, Tsuchiya suggests these limitations. Specifically, WC (see constitution, line 1) corresponds to the claimed threshold value. Tsuchiya (see constitution, starting on line 4) teaches that when an error whose magnitude of the defect exceeds WC, the error is stored, i.e., the claimed "recording only those defects that are at least as large as the threshold". Finally, the claimed "determining the number of tracks affected by the same spot defect" is accomplished by checking the unchecked tracks before and after the defective tracks (see constitution, lines 9-11) when the defects exceeding WC occur.

18. Regarding claims 7, 8 & 20, the applicant argues that there is no suggestion or disclosure within Tsuchiya for providing a threshold value to determine the number of tracks that are affected by the same spot defect and only recording those defects that are at least as large as the threshold, i.e., the rejection of claim 5 is allegedly in error. The examiner disagrees. The applicant is referred to the responses to the applicant's arguments cited above regarding claims 5

Art Unit: 2652

& 6. Since claim 5 remains rejected for the reasons given above, claims 7, 8 & 20 also remain rejected.

Conclusion

19. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

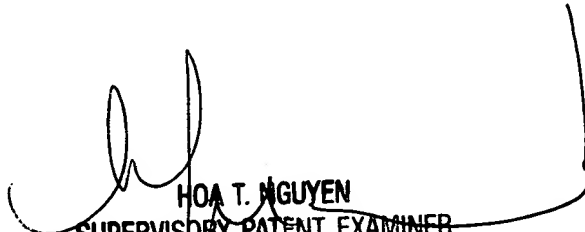
20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Vincent Agustin whose telephone number is (703) 305-8980. The examiner can normally be reached on Monday thru Friday 9:00AM - 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa Nguyen can be reached on (703) 305-9687. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2652

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Peter Vincent Agustin
Art Unit 2652
September 15, 2004


HOA T. NGUYEN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600
9/21/04